

AMENDMENTS TO THE CLAIMS

What is claimed is:

1. (Currently Amended) A method of overwriting data in a multi-session disk, comprising ~~the steps of~~:

- (a) checking the size of new data requested to be written;
 - (b) searching the multi-session disk for a session whose size is larger than the size of the new data;
 - (c) overwriting the session discovered in said step (b) with the new data; and
 - (d) updating temporary management information for tracks recorded in the multi-session disk to reflect the overwritten session in the temporary management information,
- wherein said step (c) pads a remaining area not overwritten in the session with null data.

2. (Original) The method set forth in claim 1, wherein said step (b) adds up each size of tracks included in a session, and selects the session if the added-up size is larger than the size of the new data.

3. (Original) The method set forth in claim 1, wherein said step (b) adds up each size of files included in a session, each file size having been written in file system information recorded at the head of each track of the session, and selects the session if the added-up size is larger than the size of the new data.

4. (Canceled)

5. (Original) The method set forth in claim 1, wherein said step (d) replaces the temporary management information about tracks having been included in the overwritten session with temporary management information about the new track, and moves the temporary management information about tracks in next sessions following the overwritten session to a location right after the temporary management information about the new track.

6. (Original) The method set forth in claim 5, wherein each track index number written in the moved temporary management information is changed appropriately to its track order.

7. (Original) The method set forth in claim 1, wherein said step (c) conducts the overwriting operation after confirming an overwriting request from a user.

8. (Original) The method set forth in claim 1, wherein said step (c) conducts the overwriting operation for a session selected by a user if the number of the sessions discovered in said step (b) is equal to or greater than two.

9. (Original) The method set forth in claim 1, wherein said step (b) provides a user with file information on all files included in a session, if discovered, whose size is larger than the size of the new data.

10. (Currently Amended) The method set forth in claim 1, further comprising ~~the step~~ of updating lead-in information of the overwritten session with information about the new track.

11. (Currently Amended) A method of overwriting data in a multi-session disk, comprising ~~the steps of~~:

(a) checking the size of new data requested to be written;

(b) searching the multi-session disk for a plurality of consecutive sessions whose total size is larger than the size of the new data;

(c) overwriting the consecutive sessions discovered in said step (b) with the new data;
and

(d) updating temporary management information for tracks recorded in the multi-session disk to reflect the overwritten sessions in the temporary management information,

wherein said step (c) pads a remaining area not overwritten in the consecutive sessions with null data.

12. (Original) The method set forth in claim 11, wherein said step (b) adds up each size of tracks included in the consecutive sessions, and selects the consecutive sessions if the added-up size is larger than the size of the new data.

13. (Original) The method set forth in claim 11, wherein said step (b) adds up each size of files included in the consecutive sessions, each file size having been written in file system information recorded at the head of each track belonging to the consecutive sessions, and selects the consecutive sessions if the added-up size is larger than the size of the new data.

14. (Canceled)

15. (New) A method of overwriting data in a multi-session disk, comprising:
determining a size of new data to be written onto the disk;
determining if at least one session on the disk has a file size or track size that is larger than the size of the new data; and
overwriting the at least one session on the disk with the new data if it is determined the at least one session has the file size or track size that is larger than the size of the new data.

16. (New) The method set forth in claim 15, wherein the at least one session comprises a plurality of consecutive sessions having a cumulative file size or track size that is larger than the size of the new data.

17. (New) The method set forth in claim 15, wherein the at least one session exists between two neighboring sessions.

18. (New) The method set forth in claim 15, further comprising:
updating temporary management information recorded in the disk to reflect the overwritten at least one session.

19. (New) The method set forth in claim 15, further comprising:
padding a remaining area not overwritten in the at least one session with null data.

20. (New) The method set forth in claim 15, wherein if the at least session is determined to include two or more sessions that have a file size or track size that is larger than the size of the new data, the method further includes prompting a user to select one session from the two or more sessions to be overwritten with the new data.

21. (New) The method set forth in claim 15, further comprising:
providing a user with file information about the at least session determined to have a file size or track size that is larger than the size of the new data, before overwriting the at least session with the new data.

22. (New) A disk drive, comprising:
a rotating mechanism configured to rotate a multi-session disk to be inserted into the disk drive;
an optical pickup configured to read and write data to and from the disk;
a reproduced signal processor configured to reproduce signals read from the optical pickup into digital signals;
a recording signal processor configured to record data onto the disk; and
a control processor configured to determine a size of new data to be written onto the disk, to determine if at least one session on the disk has a file size or track size that is larger than the size of the new data, and to overwrite the at least one session on the disk with the new data if it is determined the at least one session has the file size or track size that is larger than the size of the new data.

23. (New) The disk drive set forth in claim 22, wherein the control processor is further configured to control the rotating mechanism, the optical pickup, the reproduced signal processor and the recording signal processor.

24. (New) The disk drive set forth in claim 22, wherein the at least one session comprises a plurality of consecutive sessions having a cumulative file size or track size that is larger than that of the new data.

25. (New) The disk drive set forth in claim 22, wherein the at least one session exists between two neighboring sessions.

26. (New) The disk drive set forth in claim 22, wherein the control processor updates temporary management information recorded in the disk to reflect the overwritten at least one session.

27. (New) The disk drive set forth in claim 22, wherein the control processor pads a remaining area not overwritten in the at least one session with null data.

28. (New) The disk drive set forth in claim 22, wherein if the control processor determines the at least session includes two or more sessions that have a file size or track size that is larger than the size of the new data, the control processor prompts a user to select one session from the two or more sessions to be overwritten with the new data.

29. (New) The disk drive set forth in claim 22, wherein the control processor provides a user with file information about the at least session determined to have a file size or track size that is larger than the size of the new data, before overwriting the at least session with the new data.